

Amendments to the Claims:

1. (Currently Amended): A plasma enhanced chemical vapor deposition method of forming a titanium silicide-comprising layer over a substrate using a reactive gas comprising TiCl_4 and at least one silane, comprising:

providing a substrate within a plasma enhanced chemical vapor deposition chamber;

with the substrate in the chamber, first feeding TiCl_4 to the chamber without feeding any measurable silane to the chamber for a first period of time and effective to avoid measurable formation of titanium silicide on the substrate during said first period of time; and

after the first feeding for the first period of time, second feeding TiCl_4 and at least one silane to the chamber for a second period of time effective to plasma enhance chemical vapor deposit a titanium silicide-comprising layer onto ~~a conductively doped silicon surface on~~ the substrate received within the chamber during the first feeding, the titanium silicide-comprising layer deposited during the second period of time being deposited on a conductively doped silicon surface of the substrate.

2. (Original): The method of claim 1 wherein the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions.

3. (Original): The method of claim 1 wherein the feeding of TiCl_4 during the first and second feedings is at a substantially constant volumetric flow rate.

4. (Original): The method of claim 1 wherein the feeding of TiCl_4 during the first and second feedings is at different volumetric flow rates.

5. (Previously Presented): A plasma enhanced chemical vapor deposition method of forming a titanium silicide-comprising layer over a substrate using a reactive gas comprising TiCl_4 and at least one silane, comprising:

providing a substrate within a plasma enhanced chemical vapor deposition chamber;

with the substrate in the chamber, first feeding TiCl_4 to the chamber without feeding any measurable silane to the chamber for a first period of time, and wherein nothing other than TiCl_4 is fed to the chamber during the first period of time; and

after the first feeding for the first period of time, second feeding TiCl_4 and at least one silane to the chamber for a second period of time effective to plasma enhance chemical vapor deposit a titanium silicide-comprising layer on the substrate received within the chamber during the first feeding.

6. (Original): The method of claim 1 wherein the first period of time is less than the second period of time.

7. (Original): The method of claim 1 wherein the first period of time is no greater than 5 seconds.

8. (Original): The method of claim 1 wherein the first period of time is no greater than 3 seconds.

9. (Original): The method of claim 1 wherein,
the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions; and

the first period of time is less than the second period of time.

10. (Original): The method of claim 1 wherein the first feeding comprises plasma generation within the chamber.

11. (Original): The method of claim 1 wherein the first feeding does not comprise plasma generation within the chamber.

Claims 12-40 (Canceled).

41. (Previously Presented): The method of claim 1 wherein the TiCl_4 and silane are fed to the chamber from separate injection ports during the second feeding.

42. (Previously Presented): The method of claim 1 wherein the TiCl_4 and silane are mixed prior to feeding to proximate the substrate within the chamber during the second feeding.

Claims 43-46 (Canceled).

47. (Currently Amended): ~~The method of claim 1~~ A plasma enhanced chemical vapor deposition method of forming a titanium silicide-comprising layer over a substrate using a reactive gas comprising TiCl_4 and at least one silane, comprising:

providing a substrate within a plasma enhanced chemical vapor deposition chamber;

with the substrate in the chamber, first feeding TiCl_4 to the chamber without feeding any measurable silane to the chamber for a first period of time, and wherein nothing other than TiCl_4 is fed to the chamber during the first period of time; and

after the first feeding for the first period of time, second feeding TiCl_4 and at least one silane to the chamber for a second period of time effective to plasma enhance chemical vapor deposit a titanium silicide-comprising layer onto a conductively doped silicon surface on the substrate received within the chamber during the first feeding.

Claims 48-53 (Canceled).

54. (Previously Presented): The method of claim 10 further comprising continuing plasma generation within the chamber from the first feeding through the second feeding.

55. (New): The method of claim 5 wherein the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions.

56. (New): The method of claim 5 wherein the feeding of TiCl_4 during the first and second feedings is at a substantially constant volumetric flow rate.

57. (New): The method of claim 5 wherein the feeding of TiCl_4 during the first and second feedings is at different volumetric flow rates.

58. (New): The method of claim 5 wherein the first period of time is less than the second period of time.

59. (New): The method of claim 5 wherein the first period of time is no greater than 5 seconds.

60. (New): The method of claim 5 wherein the first period of time is no greater than 3 seconds.

61. (New): The method of claim 5 wherein, the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions; and

the first period of time is less than the second period of time.

62. (New): The method of claim 5 wherein the first feeding comprises plasma generation within the chamber.

63. (New): The method of claim 62 further comprising continuing plasma generation within the chamber from the first feeding through the second feeding.

64. (New): The method of claim 5 wherein the first feeding does not comprise plasma generation within the chamber.

65. (New): The method of claim 5 wherein the TiCl_4 and silane are fed to the chamber from separate injection ports during the second feeding.

66. (New): The method of claim 5 wherein the TiCl_4 and silane are mixed prior to feeding to proximate the substrate within the chamber during the second feeding.

67. (New): The method of claim 47 wherein the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions.

68. (New): The method of claim 47 wherein the feeding of TiCl_4 during the first and second feedings is at a substantially constant volumetric flow rate.

69. (New): The method of claim 47 wherein the feeding of TiCl_4 during the first and second feedings is at different volumetric flow rates.

70. (New): The method of claim 47 wherein the first period of time is less than the second period of time.

71. (New): The method of claim 47 wherein the first period of time is no greater than 5 seconds.

72. (New): The method of claim 47 wherein the first period of time is no greater than 3 seconds.

73. (New): The method of claim 47 wherein,
the second feeding occurs at selected chamber deposition pressure and substrate temperature conditions, the first feeding also occurring at the selected second feeding chamber deposition pressure and substrate temperature conditions; and

the first period of time is less than the second period of time.

74. (New): The method of claim 47 wherein the first feeding comprises plasma generation within the chamber.

75. (New): The method of claim 74 further comprising continuing plasma generation within the chamber from the first feeding through the second feeding.

76. (New): The method of claim 47 wherein the first feeding does not comprise plasma generation within the chamber.

77. (New): The method of claim 47 wherein the TiCl_4 and silane are fed to the chamber from separate injection ports during the second feeding.

78. (New): The method of claim 47 wherein the TiCl_4 and silane are mixed prior to feeding to proximate the substrate within the chamber during the second feeding.